

GOLOVIN, S. Ya.

UNKSOV, Ye.P., professor, doktor tekhnicheskikh nauk; PASTERNAK, N.A.
inzhener, redaktor; GOLOVIN, S. Ya., inzhener, redaktor; MODEL',
B.I., tekhnicheskiy redaktor

[Engineering methods of calculating stresses in processing
metals by pressure] Inzhenernye metody rashcheta usilii pri
obrabotke metallov davleniem. Moskva, Gos.nauchno-tekhn.izd-vo
mashinostroit.lit-ry, 1955. 279 p. (MLRA 8:11)
(Strains and stresses) (Metals) (Plasticity)

GOLOVIN, S. YA.

ALPHEBOV, K.V., doktor tekhnicheskikh nauk; ZEMKOV, R.L., kandidat tekhnicheskikh nauk; KRYLOV, V.I., inzhener, redaktor; GOLOVIN, S.Ya., inzhener, redaktor; POPOVA, S.M., tekhnicheskiiy redaktor.

[Bunker installations: design, calculations and operation] Bunkernye ustanovki; proektirovanie, raschety ekspluatatsii. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1955. 307 p. (MLRA 8:10)
(Conveying machinery) (Loading and unloading)

GOLOVIN, S.Ya.

HUBTSOV, N.M., laureat Stalinskoy premii, zasl.deyatel' nauki i
tekhniki, doktor tekhnicheskikh nauk, professor; VASILEVSKIY,
P.F. retsentsent, kandidat tekhnicheskikh nauk; KHYLOV, V.I.
inzhener, redaktor; SIDOROV, V.N., inzhener, redaktor;
GOLOVIN, S.Ya., inzhener, redaktor; POPOVA, S.M., tekhnicheskii
redaktor; SIKOLOVA, T.F., tekhnicheskii redaktor.

[Special types of founding] Spetsial'nye vidy lit'ia. Moskva,
Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1955. 331 p.
(Founding) (MLRA 8:10)

(GOLOVIN, S.Ya.

BOVIN, G.M.; IVASHKOV, I.I.; OLEYNIK, A.M.; TSEKOVNITSKIY, N.V.,
inzhener, retsenzent; GOLOVIN, S.Ya., redaktor; MODEL', B.I.
tekhnicheskiy redaktor.

[Escalators] Eskalatory. Moskva, Gos.nauchno-tekhn.isd-vo
mashinostroit.lit-ry. 1955. 351 p. (MLRA 8:10)
(Escalators)

Golovin, S. Ya.

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Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya

Prokatnyye stany: issledovaniya, raschet, konstruktsiya i osvoyeniye, vyp. 8
(Rolling Mills; Studies, Calculation, Design and Operation, No. 8) Moscow,
Mashgiz, 1956. 258 p. (Its: Trudy kn. 83) 3,800 copies printed.

Ed.: Korolev, A.A., Candidate of Tech. Sciences; Editing of material on
heavy machine building headed by: Golovin, S. Ya., Engineer. Tech.
eds.: Tikhonov, A. Ya. and Matveyeva, Ye. N.; Corrector: Chudakov, I.B.

PURPOSE: This collection of articles is intended for rolling-mill designers,
process engineers, scientists and instructors.

COVERAGE: This collection contains 19 articles on research and tests conducted
by TsKEMM TsNIITMASH in 1945-1955. Results of the latest experiments
conducted in the field of new rolling techniques are described.
Also, results are quoted of theoretical and experimental work done in
order to determine amount of power required for rolling blooms, strips,
car wheels and turbine-disc wheels. Articles by A.I. Tselikov and
others describe the new TsKEMM design for 12-roll mills (built by
TsNIITMASH), installed in a number of factories and successfully used

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Rolling Mills; Studies, Calculation, Design and Operation (Cont.) 227
 for rolling thin and extra-thin strips. V.F. Moseyev describes in his article a new arrangement for multiple rolling mills which allows continuous rolling at high speeds (up to 25 m/sec) and achieves a considerable increase in output. Articles by Turkin, D.S.; Pobedin, I.S.; Khrapov, K.M.; Korolev, A.A., and Baranov, N.M. elaborate on some basic technological problems of rolling and on the determination of basic characteristics in rolling wide-flange shapes in experimental rolling mills. These problems are of timely interest in connection with the construction by the UZTM of mills for rolling wide-flange shapes (up to 1000 mm). Articles by Pobedin, I.S.; Baykov, V.I. and Drozd, V.G. describe a new 12-stand continuous cold-rolling mill for thin wire (to 1.8 mm diameter). Results of the application of this new process are also given. Articles by Korolev, A.A. and Tret'yakov, A.V., quote results of research on and use of the new combination multiple-roll mill used in the "Hammer and Sickle" plant for rolling thin strip steel. Articles by Rokotyan, Ye.S., Meyerovich, I.M. and others describe results of experiments conducted on blooming, cold-rolling, duralumin-dressing, and car wheel rolling mills. Articles by Anisifirov, V.M.; Korolev, A.A.; Morozov, B.A.; Polezhayev, A.A., and Lavrov, A.A. give the results of research in the fields of durability and efficiency of metallurgical machinery. There are 57 references, of which 52 are Soviet, 3 USA, 2 German.

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Tselikov, A.I., Corresponding Member of the USSR Academy of Sciences; Korolev, A.A. and Kuz'min, A.D., Candidates of Tech. Sciences; Kogos, A.A., Engr.; Solov'yev, P.I., Engr. Multiple-Roll Mills, Built by TsKPM TsNIITMASH

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Moseyev, V.F., Engr. Study of a High-Speed Mill for Continuous Drawing of Low-Carbon Steel Wire

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Pobedin, I.S., Khrapov, M.M., Candidates of Tech. Sciences. Theoretical Determination of Moments Developed During Rolling of Structural Shapes

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Rolling Mills, Studies, Calculation, Design and Operation (Cont.)

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AVAILABLE: Library of Congress

6/6

GOLLOVIN, S Ya.

Call Nr: TN 677 .K34

AUTHOR: Kasenkov, M. A.
TITLE: Forging Furnaces; Construction and Operation
(Kuznechnyye pechi; ustroystvo i rabota)
PUB. DATA: Gosudarstvennoye nauchno-tekhnicheskoye izdatel'stvo
mashinostroitel'noy literatury, Moscow, 1957, 320 pp.,
6,000 copies
ORIG. AGENCY: None given
EDITORS: Editor: Teben'kov, B. P., Candidate of Technical
Sciences; Editor of the Publishing House:
Golovin, S. Ya., Eng., Tech. Ed.: Matveyeva, E.N.;
Corrector: Kukharchik, V. P.; Reviewer:
Prof. Mariyenko, L. M., Dr. of Technical Sciences
PURPOSE: This book is designed for personnel of forging shops
and can be useful to students of technological
institutes.
COVERAGE: The book furnishes useful information for personnel
of forging shops in charge of maintenance and opera-
tion of heating furnaces. It covers the fundamentals
of the technology of metals and forging processes,
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Call Nr: TN 677 .K34

Forging Furnaces; Construction and Operation (Cont.)

and discusses problems of fuel combustion and improvement of furnace efficiencies, of construction and repair of heating furnaces and appliances, and of the industrial safety and hygiene connected with the operation of heating furnaces. This book contains Russian contributions. No personalities are mentioned; there are 57 bibliographic references, 56 of which are USSR, 1 English.

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GOLOVIN, S. Ya.

KRIVOSHEYN, Andrey Yevdokimovich, professor, doktor tekhnicheskikh nauk;
~~GOLOVIN, S. Ya.~~, redaktor; SIDOROV, V.N., inzhener, redaktor
~~Industriya~~; MIKHAYLOVA, V.V., tekhnicheskij redaktor

[Cast rolls; theoretical and technological principles of production]
Litye volki; teoreticheskie i tekhnologicheskie osnovy proizvodstva.
Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po cherno i tsvetnoi metal-
lurgii, 1957. 360 p. (MLRA 10:8)
(Rolls (Iron mills))

AUTHOR: Golovin, S.Ya. SOV/128-58-12-18/21
TITLE: Twenty Years of Literature on Foundry Practice (Literatura po liteynomu proizvodstvu za 20 let)
PERIODICAL: Liteynoye proizvodstvo, 1958, Nr 12, pp 27 - 28 (USSR)
ABSTRACT: Information is given on the activities of the Mashgiz publishing house during the 20 years of its existence. The most important works on the foundry practice published during this period are listed.

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STEBAKOV, Ye.S., kand.tekhn.nauk; TARUTIN, V.Ya., kand.tekhn.nauk; COLOVIN,
S.Ya., inzh.

Power presses or foundry machines? Vest. mash. 38 no.9:27-28
S '58. (MIRA 11:10)

(Molding (Founding))

NIKIFOROV, Vikentiy Markianovich, inzh.; POJODIN-ALEKSEYEV, Georgiy
Ivanovich, prof., doktor tekhn.nauk; PROSKURYAKOV, Vasilii
Aleksyevich, dotsent; PROSKURYAKOV, Vladimir Aleksandrovich,
dotsent; YEACHEV, Konstantin Ivanovich, dotsent; GOLOVIN, S.Ya.,
red.; SLAVIN, D.O., red.; NAUMOV, K.M., tekhn.red.

[Technology of the most important branches of industry] Tekhnologiya
vashneiishikh otraslei promyshlennosti. Moskva, Izd-vo VPSH i AON
pri TsK KPSS. Pt.1 [Metallurgy and metallography; textbook for
students in advanced party schools] Metallurgiya i metallovedenie;
uchebnoe posobie dlia vysshikh partiinykh shkol. 1959. 271 p.
(Metals) (MIRA 12:4)

25(1)

PHASE I BOOK EXPLOITATION

SOV/2399

Golovin, Sergey Yakovlevich

Osobyie vidy lit'ya; kratkie spravochnyye materialy (Special Types of Casting; Short Reference Materials) Moscow, Mashgiz, 1959. 462 p. Errata slip inserted. 15,000 copies printed.

Reviewers: N.N. Rubtsov, Doctor of Technical Sciences, Professor, Honored Worker in Science and Technology, and P.M. Platonov, Engineer; Ed.: G.P. Balandin, Candidate of Technical Sciences; Ed. of Publishing House: T.L. Leykina; Tech. Ed.: L.V. Schetina; Managing Ed. for Literature on Technical Machine Building (Mashgiz): Ye. P. Naumov, Engineer.

PURPOSE: This book is intended for foundry workers.

COVERAGE: This book contains basic information on special casting methods, a brief description of theoretical casting principles, technological processes and designs, and technical specifications for equipment. The material in the book is so presented as to facilitate the selection of the proper casting methods for any given case. The author also discusses casting of nonmetal-

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PHASE I BOOK EXPLOITATION

SOV/5647

Golovin, Sergey Yakovlevich

Kratkiy spravochnik liteyshchika (The Foundryman's Concise Handbook) Moscow, Mashgiz, 1960. 375 p. 25,000 copies printed.

Reviewer: M. M. Vyshemirskiy, Engineer; Ed. of Publishing House: A. I. Varbovetakaya; Tech. Ed.: P. S. Frumkin; Managing Ed. for Literature on Machine-Building Technology (Leningrad Department, Mashgiz): Ye. P. Nannov, Engineer.

PURPOSE: This handbook is intended for foundrymen and students at mechanical-engineering schools of higher education.

COVERAGE: Concise information on sand casting (primarily numerical data in the form of tables and diagrams) is presented. The handbook also contains general information on making simple calculations as well as data on molding materials, mixtures and their composition, washes, various types of patterns, flasks, molds, gating systems, charge materials, refractories, fuels, etc. No personalities are mentioned. There are 65 references, all Soviet.

Card 1/5

BIDULYA, Pavel Nikolayevich; GOLOVIN, S.Ya., red.; GOLYATKINA, A.G., red.
isd-va; ISLENT'YEVA, P.G., ~~tekh.~~ red.

[Technology of steel casting] Tekhnologiya stal'nykh otlivok. Mo-
skva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi me-
tallurgii, 1961. 352 p. (MIRA 14:7)
(Steel castings) (Founding)

GOLOVIN, Sergey Yakovlevich, kand. tekhn. nauk; MEL'NIKOVA, Zh.M.,
red.

[Progressive foundry practices] Progressivnye vidy lit'ia.
Moskva, Znanie, 1964. 31 p. (Novoe v zhizni, nauke,
tekhnike. IV Seriya: Tekhnika, no.23) (MIRA 17:11)

GOLOVIN, Y.

Contribution of innovators. Ochr. truda i sots. strakh, no.4:13
Ap '63. (MIRA 16:4)

1. Oshen zavodskogo komiteta zavoda "Svetlana".

(Glass blowing and working—Hygienic aspects)

Golevin, V.

84-5-9/42

AUTHOR: Golevin, V., Assistant Commander of a Flight Service Unit (Voronezh)

TITLE: Work Organization of a Composite Squadron (Organizatsiya raboty svodnogo aviaotryada)

PERIODICAL: Grazhdanskaya Aviatsiya, 1957, Nr 5, pp. 12-14 (USSR)

ABSTRACT: The article discusses one instance of the use of the special-purpose aviation in spraying chemicals in the Volga region. Last year (1956) a composite squadron of the Moscow aerial photography and special-purpose aircraft was used in Saratov oblast for pest extermination operations. The teams of the squadron maintained their original personnel: it was not believed advisable to get personnel from different units to work as a team. The operational group supervising the operations was composed of the commanders of the participating teams, the assistant commander of the flight service unit (Moscow adm.) and an engineer for special-purpose assignments. First the operational group got in touch with the oblast's farm authorities, checked the availability of insecticides, established the scope of operations and got acquainted with the co-ordinating personnel representing the local authorities. The job was organized through the MTSs; the Oblispolkom sent a circular to each MTS concerned informing them of their duties. The squadron used different types of aircraft, viz. An-2, YAK-12, and PO-2. Of the 7 rayons to be sprayed by the planes, 6 were on the right bank and 1 on the left bank of the Volga. The right-bank area was furrowed by ravines, the

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Work Organization of a Composite Squadron

left-bank rayon was flat. Hence, it was decided to use the An-2 in the right-bank area since the An-2 plane has more power and climbs faster than other planes. This latter fact was important in a region where many airfields were located in valleys. However, since the number of A-2 planes was not sufficient, only the most difficult areas were assigned to this type of plane; therefore, one rayon was taken care of by the team of An-2 planes under comrade Dorokhov, two other rayons - by the team under com. Kozakov. Two additional right-bank rayons were assigned to the team under comrade Shcherbinin, using not only An-2, but also Po-2 planes. The last right-bank rayon, closest to the staff, was assigned to the team under comrade Ivashkevich employing Po-2 and YAK-12 planes. The only left-bank rayon was taken care of by a team of Po-2 planes, commanded by com. Dorofeyev. Two days were spent by each team to get acquainted with the conditions of flight and the tasks to be performed. Comrade Trutayev is mentioned as chief of the operational group. The operations were carried out from the base airfield, the time of departure and landing being appointed in advance for each team. Returning back to the base, 3 or 4 planes could land and park within 10-15 minutes, freeing the landing area for the next group. Crews under comrade Shonin (An-2) and Merkukhin (Po-2)

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84-5-9/42

Work Organization of a Composite Squadron

covered 15,350 and 5,792 ha, respectively. Average coverage (in hectares) per plane was 11,016 for An-2, 5,112 for YAK-12, and 4,350 for Po-2. Photo (taken by Ye. Shulepov) shows an An-2 plane spraying a field.

AVAILABLE: Library of Congress

Card: 3/3

GOLOVIN, V.

Ball float. Tekh. mol. 23 no.6:33 Je '55. (MLRA 8:9)
(Boats and boating)

GOLOVIN, V.

RESEARCHER

Necklace of solar batteries. Izv. tekhn. 4 no. 11:64-65 N '59,
(MIRA 13:4)
(Solar energy)

GOLOVIN, V.

"Medeksport", a new all-Union association. Vnesh. torg. 41 no.3:
26 '61. (MIRA 14:2)
(Medical supplies) (Russia—Commerce)

GOLOVIN, V.

Photographic apparatus out of match boxes. Nauka i zhizn' 29
no. 5:104-105 My '62. (MIRA 15:11)
(Photography--Apparatus and supplies)

GORDON, M.; GOLOVIN, V.

Special equipment for campers. Tekh.mol. 29 no.6:30-31 '61.

(MIRA 14:7)

(Camping---Outfits, supplies, etc.)

GOLOVIN, V., konstruktor

Micromotor awaits new assignments. Nauka i zhizn' 30 no.4:59
Ap '63. (MIRA 16:7)

(Electric, Motors)

PRZHIYEMSKIY, Yu., inzh.; DEMIN, V., kand.fiziko-matem.nauk; VASIN, N.,
kand.med.nauk, nauchnyy sotrudnik; GOLOVIN, V.; DELONE, B., master
sovetskogo al'pinizma

Eight answers to one question: how to you rest? Nauka i zhizn' '29
no.7:15-17 J1 '62. (MIRA 16:6)

1. Sotrudnik Gosudarstvennogo astronomicheskogo instituta imeni
P.K.Shternberga (for Demin). 2. Institut neyrokhirurgii imeni
akademika N.W.Burdenko AN SSSR (for Vasin). 3. Sotrudnik
Moskovskogo gosudarstvennogo universiteta (for Golovin).
4. Chlen-korrespondent AN SSSR (for Delone).
(Rest)

GOLOVIN, V. A., Cand Agr Sci -- (diss) "Effect of various
types of ^{feeding} ~~feeding~~ upon ^{productive} ~~productive~~ qualities of cattle." Perm',
1957. 15 pp (Min ~~at~~ Agr USSR, Perm' Agr Inst im D. N. Prya-
nishnikov), 120 copies (KL, 52-57, 109)

- 87 -

GOLOVIN, V.A.

[Reflection of oscillations of life in the second signal system]
Otrazhenie kolebani zhizni vo vtoroi signal'noi sisteme. [Moskva]
Mosk. gos. univ. im. M.V. Lomonosova, 1956. 29. (MIRA 11:9)
(Conditioned response) (language and languages)

GOLOVIN, V. A.

PA 45/49795

USSR/Metals

Mar 49

Alloys
Plastic Deformation

"Deformation of Copper-Nickel Alloys," S. I. Gublin, Active Mem, Acad Sci, Belorussian SSR, V. A. Golovin, Inst of Metal Imeni A. A. Baykov, Acad Sci USSR, 5 pp

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 3

Studies of graphs based on experimental data enabled qualitative and quantitative evaluations of these alloys' ability to undergo plastic deformation under influence of pressure.

45/49795

USSR/Metals

(Contd)

Mar 49

Confirmed results by tests under factory conditions. Claims this method can be used to solve technological problems in the processing of metals by pressure. Submitted 12 Jul 48.

45/49795

GOLOVIN, V. A.

"Deformability of Copper-Nickel Alloys." Thesis for degree of Cand. Technical Sci.
Sub 13 Mar 50, Moscow Inst of Nonferrous Metals and Gold Imeni M. I. Kalinin

Summary 71, 4 Sep 52, Dissertations Presented for Degrees in Science and Engineering
in Moscow in 1950. From Vechernyaya Moskva. Jan-Dec 1950.

Golovin, V.A.
GOLOVIN, V.A.

Remarks on the article by A.I. Kiseleva, A.A. Presniakov,
and M. D. Rosenberg. TSvet.met. 27 no.4:59-61 J1-Ag '54.

(MIRA 10:10)

(Nickel alloys) (Rolling (Metalwork))

(Kiseleva, A.I.) (Presniakov, A.A.)

(Rosenberg, M.D.)

SOV/137-58-12-24463

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 12, p 73 (USSR)

AUTHOR: Golovin, V. A.

TITLE: An Investigation of the Process of Forging Coining Tools (Issledovaniye protsessa shtampovki chekanochnogo instrumenta)

PERIODICAL: Sb. tr. Vses. n.-i. in-t Gosznaka, 1957, Vol 1, pp 250-270

ABSTRACT: An analysis is made of the process of manufacture of coining tools, and the influence of a number of factors upon the quality thereof is determined. An analysis of the process of deformation in the conversion procedure is made. The nature of the metal flow is studied experimentally with the aid of specimens to which a coordinate grid has been applied, and also by macroanalysis and measurement of change in hardness. The following is established: 1) The influence of the taper of the blank, strain rate, and lubricant upon the pressure and the degree to which the die fills; 2) the effect of manufacturing technique upon the strength of the finished tool. Practical recommendations are advanced with respect to utilization of the most rational methods of conversion in accordance with the shape and size of the blank.

Card 1/1

M. Ts.

DEYCH, M.Ye., doktor tekhn.nauk, prof.; KAZINTSEV, F.V., inzh.; GOLOVIN,
V.A., inzh.

Automatic computing device for solution of energy-loss equations used
in the study of turbine bladings. Energomashinostroenie 5 no.3:31-34
Mr!59. (MIRA 12:3)

(Turbines)

7 14

AUTHORS: Golovin, V. A., Nessonov, V. D.

SOV/32-25-1-43/51

TITLE: Heat Resistant Wire Tension Cell on Glass Cloth (Termostoykiy provolochnyy tenzodatchik na stekloshpone)
 PERIODICAL: Zavodskaya Laboratoriya, 1959, Vol 25, Nr 1, pp 117-119 (USSR)

ABSTRACT: At present a large number of tension cells for higher temperatures are known (Refs 1,2) which do, however, not have the required properties. The tension cells DK on paper basis with the synthetic resin BF can be used up to 150-200° only as the carbonization of the paper destroys the adhesion of the cell to the metal sample. Experiments showed that glass cloth is a better basis than paper (Ref 3); the former is a material which consists of two layers of glass threads glued together with the BF-2 glue. The production technique and the application of the tension cells ST are described. A polymerized glass cloth of a thickness of 40-60 μ is used. The cellular grid is made, as usual, of constantan wire (diameter 30 μ) and the glue BF-2 is applied. It is pointed out that the fibers of the cloth should run perpendicularly to the grid wires. After the cell has been produced and fixed the place is covered with PKE-14 enamel (Ref 4). To determine the properties of the tension cell some

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Heat Resistant Wire Tension Cell on Glass Cloth

SOV/32-25-1-43/51

investigations were carried out. With an increase in temperature of up to 200° the sensitivity decreases a little (from 2.01 to 1.93) and remains constant up to 300°. The upper temperature limit is given to be 350°, at which the ST-cells operate only for 1.5-2 hours. There are 4 references, 3 of which are Soviet.

Card 2/2

GOLOVIN V. A.

3

PHASE I BOOK EXPLOITATION

SOV/5530

Smiryagin, A. P., N. Z. Dnestrovskiy, A. D. Landikhov, N. N. Kreyndlin,
G. N. Krucher, V. A. Golovin, B. L. Urin, and V. N. Gol'dreyer

Spravochnik po obrabotke tsvetnykh metallov i splavov (Handbook on the
Processing of Nonferrous Metals and Alloys) Moscow, Metallurgizdat,
1961. 872 p. Errata slip inserted. 9,300 copies printed.

Ed. (Title page): L. Ye. Miller, Candidate of Technical Sciences; Ed. of
Publishing House: K. D. Misharina; Tech. Ed.: M. K. Attopovich.

PURPOSE: This handbook is intended for technical personnel of metal-
working and machine-building plants, design organizations, scientific
research institutes, and laboratories, and for students at schools of
higher technical education.

COVERAGE: The handbook discusses the physicochemical and mechanical
properties of certain elements and the composition and properties of

Card 1/8.

GOLOVIN, V.A.; KANTSEL', A.V.; SHUMILIN, M.V.

Some structural characteristics of the exogenic uranium mineralization
control in sedimentary and tufaceous rocks. Geol. rud. mestorozh.
no.2:125-129 Mr-Apr '61, (MIRA 14:5)
(Uranium)

NORITSYN, I.A., doktor tekhn. nauk, prof.; GOLOVIN, V.A., kand. tekhn.
nauk, docent; BAZIK, A.S., inzh.

Development of processes of closed-die forging. Vest. mashinostr.
43 no.12:38-42 D '63. (MIRA 17:8)

GOLOVIN, Vladimir Andreyevich, kand. tekhn. nauk; UI'YANOVA,
Elisa Khaimovna, kand. tekhn. nauk; MAHENKOV, Ye. A., doc.

[Properties of noble metals and alloys; a handbook] Svoistva blagorodnykh metallov i splavov; spravochnik. Moskva, Izd-vo "Metallurgiya," 1964. 187 p. (MIRA 1811)

GOLDOVIN, V.A., inzh., dissertant; ZANIN, A.I., inzh.; KAZINTSEV, F.V.,
inzh., dissertant

Methods for studying models of the terminal stages of steam
turbines operating on wet steam. Teploenergetika 12 no.3:71-
75 Mr '65. (MIRA 18:6)

1. Moskovskiy energeticheskiy institut.

NORITSYN, I.A., doktor tekhn.nauk, prof.; GOLOVIN, V.A., kand.tekhn.nauk,
dotsent; AKARO, I.I., inzh.

Heat release during die forging and pressing. Vest.mashinostr. 45
no.9:59-64 § '65. (MIRA 18:10)

GOLOWIN, V.A., inzh.; BAGAUTDINOV, R.R., inzh.

Air-blast switches with simplified drives. Elek. sta. 36 no.12:
61-63 D '65. (MIRA 18:12)

1. 100000-66 2. 000000-00 3. 000000-00 4. 000000-00 5. 000000-00 6. 000000-00 7. 000000-00 8. 000000-00 9. 000000-00 10. 000000-00 11. 000000-00 12. 000000-00 13. 000000-00 14. 000000-00 15. 000000-00 16. 000000-00 17. 000000-00 18. 000000-00 19. 000000-00 20. 000000-00 21. 000000-00 22. 000000-00 23. 000000-00 24. 000000-00 25. 000000-00 26. 000000-00 27. 000000-00 28. 000000-00 29. 000000-00 30. 000000-00 31. 000000-00 32. 000000-00 33. 000000-00 34. 000000-00 35. 000000-00 36. 000000-00 37. 000000-00 38. 000000-00 39. 000000-00 40. 000000-00 41. 000000-00 42. 000000-00 43. 000000-00 44. 000000-00 45. 000000-00 46. 000000-00 47. 000000-00 48. 000000-00 49. 000000-00 50. 000000-00 51. 000000-00 52. 000000-00 53. 000000-00 54. 000000-00 55. 000000-00 56. 000000-00 57. 000000-00 58. 000000-00 59. 000000-00 60. 000000-00 61. 000000-00 62. 000000-00 63. 000000-00 64. 000000-00 65. 000000-00 66. 000000-00 67. 000000-00 68. 000000-00 69. 000000-00 70. 000000-00 71. 000000-00 72. 000000-00 73. 000000-00 74. 000000-00 75. 000000-00 76. 000000-00 77. 000000-00 78. 000000-00 79. 000000-00 80. 000000-00 81. 000000-00 82. 000000-00 83. 000000-00 84. 000000-00 85. 000000-00 86. 000000-00 87. 000000-00 88. 000000-00 89. 000000-00 90. 000000-00 91. 000000-00 92. 000000-00 93. 000000-00 94. 000000-00 95. 000000-00 96. 000000-00 97. 000000-00 98. 000000-00 99. 000000-00 100. 000000-00

ACC NO. AM502583

BOOK EXPIRATION

44.55

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51
B+1

Author: Andreyev, Viktor Pavlovich; Solov'ev, Vladimir Andreyevich

Production of semifinished products from precious metals and alloys; a manual (Proizvodstvo polufabrikatov iz dragotsennyykh metallov i splavov; spravochnoye rukovodstvo). Moscow, Izdat. Mashinostroyeniya, 1965, 403 p. illus., tables, diag., fold chart. Biblio., errata slip inserted. 1,850 copies printed.

WORK TAGS: precious metal alloys are furnace, induction furnace, metal casting, metal pressing, bimetal, sheet metal, thermochemistry

PURPOSE AND SCOPE: In this manual for the first time the research data and the industrial practice in the field of technology of basic and auxiliary processes of metal preparation, ingot casting of precious metals and alloys, and the manufacture from the latter of first semifinished products are generalized. The classification problems and the purposes to be served by the precious metals and alloys, their preparation for melting, casting methods, fusion, protection from oxidation and gas saturation, reduction, ingot casting and processing into sheets, foil, leaf metal, and bimetals are elucidated. Data on the accumulation of impurities in the metals and their effect upon metal properties are added. Physical nature and calculation methods of the metallurgical metal losses, theoretical concepts and interacting mechanisms of liquid and solid metals with the refractory materials, shielding action, coatings, fluxes, refining agents and technological lubricants are considered. The

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ACC NO. AN502383

properties of products and the instructions for their usage are appended. Characteristics, selection of manufacturing features, and use of technological equipment and apparatus are discussed. The material on the withdrawal of the test samples from molten metal and ingots is systematized and the conditions necessary for the testing precision increase are indicated. The concepts of reduced ingot thickness and of reduced casting rates are introduced and the equations for their calculations are appended. The defect analysis methods depending on the nature and origin of the defect are suggested. Conditions for the defect elimination and prevention and also for the quality improvement and other measures are stated. The authors acknowledge the contributions by Belikov, I. S. (Candidate of Technical Sciences); Basilavskiy, V. A. (Candidate of Technical Sciences); Anisimovskiy, I. K. (Engineer); Gerasimov, I. A. (Engineer); Ivanov, E. A. (Engineer); Anisimov, A. I. (Engineer); and Gerasimov, I. I. (Engineer). This monograph is designed for metallurgists, technologists, chemists, and designers connected with research, development, production and use of semifinished products and manufactured objects from precious metals and alloys.

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Ch. I. Purpose and classification of precious metals and alloys -- 7

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ACC NO: 445025385

Ch. II. Production of ingots for hot and cold working -- 34

Ch. III. Production of flat semi-finished products by hot and cold working -- 328

Ch. IV. Semi-finished product ingots -- 376

SUBMITTED: 07/21/65

SUB CODE: PM, IE

NO REF SOV: 082

ORDER: 018

0-2 2/3

ACC NR: AP7003846

(A)

SOURCE CODE: UR/0122/67/000/001/0054/0057

AUTHORS: Moritayn, I. A. (Doctor of technical sciences, Professor); Golovin, Y. A. (Candidate of technical sciences, Docent); Bukin-Batyrev, I. K. (Engineer)

ORG: none

TITLE: Increasing the extrudability of structural carbon steels for cold extrusion

SOURCE: Vestnik mashinostroyeniya, no. 1, 1967, 54-57

TOPIC TAGS: metal extrusion, carbon steel, plastic deformation, ferrite, pearlite, annealing, hardness, metal heat treatment/ 10 carbon steel, 20 carbon steel, 35 carbon steel, 45 carbon steel

ABSTRACT: This work establishes a quantitative relationship between the conditions of preliminary heat treatment of blanks and the cold extrudability of the most widely used structural carbon steels 10, 20, 35, and 45. The low-carbon steels (10, 20) were subjected to subcritical and supercritical annealing. The high-carbon steels (35, 45) were subjected to cyclic annealing and to other combined treatments. The tests of 10 steel showed that, in the presence of supercritical (740--760C), cyclic (4 cycles from 650 to 780C) and high-temperature (1050C) annealing, strong grain growth occurred, which reduced the hardness (see Fig. 1). It was established that the maximum increase in extrudability is achieved for 10 steel with supercritical annealing, for 20 steel with normalization and annealing, and for 35 and 45 steels with cyclic annealing and

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SUB CODE: 13,11/SUBM DATE: none/

MMC: 621 083 1.660 14 20

Card 2/2

GOLOVIN, V.D.

Riesz's basis of exponential functions. Dokl.AN SSSR 145 no.1:
27-30 JI '62, (MIRA 15:7)

1. Khar'kovskiy gosudarstvennyy universitet imeni A.M.Gor'kogo.
Predstavleno akademikom S.N.Bernshtaynom.
(Functions, Exponential)

GOLOVIN, V.D.

Generalization of the concept of periodic continuation. Dokl.
AN SSSR 149 no.3:502-504 Mr '63. (MIRA 16:4)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M.Gor'kogo.
Predstavleno akademikom S.N.Bernshteynom.
(Functions) (Sequences (Mathematics))

GOLOVIN, V.D.

Functions periodic in the mean. Dokl. AN SSSR 150 no.1:17-20 My
'63. (MIRA 16:6)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M.Gor'kogo.
Predstavleno akademikom S.N.Bernshteynom.
(Functions, Periodic)

GOLOVIN, V.D.

Stability of the base of an exponential function. Dokl. AN Arm.
SSR 36 no.2:65-70 '64. (MIRA 17:3)

1. Khar'kovskiy gosudarstvennyy universitet imeni Gor'kogo. Pred-
stavleno akademikom AN Armyanskoy SSR, M.Dzhrbashyanom.

GOLOVIN, V. P.

"The Krasnoyarsk Forest Steppe (Physico-geographical Characteristics)." Cand Geog Sci, Tomsk State U, Tomsk, 1954. (RZhGeol, Mar 55)

SO: Sum. No. 570, 29 Sep 55-Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

GOLOVIN, V.M.

Characteristics of the frequency of and the particular features of diseases of the blood and hemopoietic organs according to prosection autopsy data in Kishinev. Zdravookhranenie 5 no.4:36-43 J1-Ag '62.

(MIRA 15:9)

1. Iz kafedry patologicheskoy anatomii (zav. - dotsent V.Kh. Amestiadi) Kishinevskogo meditsinskogo instituta.

(KISHINEV---HEMOPORTIC SYSTEM---DISEASES) (KISHINEV---BLOOD---DISEASES)

GOLOVIN, V. M., Candidate Med Sci (diss) -- "Gastric and duodenal ulcer caused by atophan (Pathogenesis, morphology)". Kishinev, 1959. 15 pp (Kishinev State Med Inst, Chair of Path Anatomy), 250 copies (KL, No 25, 1959, 140)

1. GOLOVIN, V. M.
2. USSR (600)
4. Geography & Geology
7. Works; voyage on the boat "Diana," Izd. Glavsevmorput, 1950.

9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

10.2000

262182

84043

S/147/60/000/003/001/018

E022/E420

AUTHORS: Kudryashev, L.I. and Golovin, V.M.

TITLE: The Influence of the Dissipation of Mechanical Energy on the Coefficient of Hydraulic Resistance and on the Flow Rate Through Narrow Ducts in the Laminar Flow Regime |

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Aviatsionnaya tekhnika, 1960, No.3, pp.3-11

TEXT: A quantitative assessment is made of the influence of the dissipation of mechanical energy in the laminar flow of liquids γ through narrow ducts whose length l is so large compared with the height $2h$ that the contribution of the initial portion of the duct to the total flow resistance may be considered as negligible. The equations of motion, continuity and energy for the laminar non-isothermal flow are given in vectorial form by Eq.(1), in which most of the symbols have their usual meaning except I , which is the mechanical equivalent of heat, and \dot{S} , which is the tensor of the rate of deformation of the fluid. Assuming that the velocity vector \vec{v} satisfies the condition of Eq.(3), then it can be expressed by the relation of Eq.(2); by considering only
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stationary problems and neglecting the body forces \bar{F} , Eq.(1) can be transformed into Eq.(5). Although Eq.(5) appear more involved than Eq.(1), they are, however, more tractable as regards both the admission of simplifying assumptions for their solution and the analysis of these solutions. In particular, Eq.(5) facilitate the selection of problems which can be solved by means of separation of variables. Some 2-dimensional flows are then considered which satisfy Eq.(2). First, the flow is studied in a narrow duct, with the axis of symmetry along x-axis, when the temperature of the bottom wall T_{w1} is different from that of the top wall T_{w2} , and the conditions are sought which would make the flow to be a function of pressure p only. It is shown that such a flow is possible only at some distance downstream from the entry section, i.e. where the flow is stable. Next, the problem of dissipation of mechanical energy in the region of this stable flow is tackled under the assumption that the temperatures of both walls are equal and the pressure gradient along the duct is constant.

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Eq.(1) transform then to Eq.(8) with boundary conditions as in Eq.(9). Assuming further that the temperature gradient between the walls and the fluid is not large ($\Delta T \approx 10^\circ\text{C}$) and that the temperatures of the liquids used in practice (water, oil, spirits, lubricants etc.) are of the order of 20 to 100°C , then - as shown in Ref.2 and 3 - the viscosity may be expressed by Eq.(10) or (11), where μ_w is the viscosity at the wall temperature T_w , while the thermal conductivity may be considered as constant, i.e. $\lambda = \lambda_w$. With these assumptions, Eq.(8) may be integrated as shown on p.7, giving eventually the velocity of the flow in Eq.(18) and the rate of flow in Eq.(19) or Eq.(20). These results are then compared with the known classical solutions, Eq.(21), and it is shown that the two results are identical in the limit, i.e. when $Re_1 \rightarrow 0$, (Eq.(26)). Finally, the coefficient of resistance is evaluated. This is done by taking into account the change in the mean velocity of the flow produced by the change in

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the viscosity of the fluid, when compared with the mean velocity
as resulting from Eq.(21). This leads to Eq.(29), (30) and (31),
the last formula being the actual correction due to dissipation of
the mechanical energy. There are 1 figure and 4 Soviet
references (one is a translation into Russian of Janke and Emde's
tables). X

ASSOCIATION: Kuybyshevskiy aviatsionnyy institut Kafedra
aerogidrodinamiki (Kuybyshev Aviation Institute,
Chair of Aero- and Hydrodynamics)

SUBMITTED: February 29, 1960

Card 4/4

88240

S/152/60/000/012/006/007
B027/B068

10.2000

AUTHORS: Kudryashev L. I., Golovin V. M.

TITLE: Effect of Dissipation of Mechanical Energy on the Hydraulic Resistance Coefficient for Laminar Flow in Tubes With Circular Cross Sections

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Neft' i gaz, 1960,
3- No. 12, pp. 105 - 112

TEXT: It is frequently necessary to determine the resistance to laminar flow in long pipelines. Heating of the liquid by internal friction may be rather important, if a highly viscous product is concerned. Hence, it is necessary to determine quantitatively the effect of mechanical energy dissipation on the output of the pipe, and the resistance coefficient. In this paper, an attempt referring to this is described, since this problem has not yet been solved, with the exception of some general data given by the academicians V. G. Shukhov and L. S. Leybenzon. A number of equations was established, from which follows that the classical Stokes solution is

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Effect of Dissipation of Mechanical Energy S/152/60/000/012/006/007
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a first approximation. The calculations show that the effect of the mechanical energy dissipation on the throughput and the resistance coefficient is the greater, the smaller the pipe diameter and the more viscous the fluid. Thus, the throughput of the pipe may be increased by 10 to 15%. The effect of energy dissipation may be, therefore, calculated from equations 30 and 31, respectively: ✓

$$\frac{Q}{Q_1} = \frac{2}{\xi} \cdot \frac{J_0(\xi)}{J_0'(\xi)} \quad (30);$$

$$D = \left[\frac{\xi J_0'(\xi)}{2 J_1(\xi)} \right]^2 \quad (31).$$

Q = throughput, $\xi = 0.5 \pi R^2 = A Re_1$ (R = radius of the pipe),
 $m^2 = (6/4 \pi \lambda_w \mu_w) (dp/dz)^2$; $\delta = 0.1 \left[\mu_w / \mu_{T_w+10^\circ C} - 1 \right]$; μ_w = viscosity at the

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Effect of Dissipation of Mechanical
Energy on the Hydraulic Resistance
Coefficient for Laminar Flow in Tubes
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temperature T_w of the tube-wall; λ_w = heat conductivity at T_w ; J = mechanical heat equivalent; $D = 1/4 [1 - J_1'(ARe_1)/J_0(ARe_1)]^2$ is the correction for energy dissipation; $A = n(\mu_w)^2 / \rho_w R$; Re_1 = Reynolds number. The authors further develop the suggested solution with respect to various liquids and non-isothermal flow. There are 1 figure and 3 Soviet references.

ASSOCIATION: Kuybyshevskiy aviatsionnyy institut (Kuybyshev Aviation Institute) X

SUBMITTED: February 23, 1960

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10.4100

20593

S/147/61/000/001/002/016
EO22/E135

AUTHORS: Kudryashev, L.I., and Golovin, V.M.
TITLE: On the Solution of Stability of the Laminar Flow of Viscous Fluids Flowing Between Flat Parallel Walls
PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Aviatzionnaya tekhnika, 1961, No. 1, pp. 13-18

TEXT: The problem of stability of the laminar flow has attracted much research which indicates its importance both theoretically and practically. In spite of so much effort being spent on the problem it is not fully solved as yet, (Ref.1). The reason is the great mathematical complexity of the problem. Various simplifications made by some authors in order to enable this problem to be solved are sometimes questionable. One of the main shortcomings of the theoretical analysis of the problem is that in most cases heat transfer with the surroundings, as well as the heat effect produced by internal friction, are neglected. However, these two effects influence physical properties of the fluid and therefore the flow of the fluid must also be affected. It is basically erroneous to assume that these effects are

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On the Solution of Stability of the Laminar Flow of Viscous
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negligible especially at higher velocities and at large Reynolds
number values, when dealing with the stability of the laminar
flow. The present work has as its object the evaluation of the
effect of these factors, and for that reason the basic equations
of motion include dependence of the physical parameters of the
fluid on the temperature:

$$\rho \frac{d\bar{v}}{dt} = \rho \bar{F} - \text{grad } p + \mu \Delta \bar{v} + 2 \text{grad } \mu \cdot \dot{\bar{S}} + \frac{1}{3} \mu \text{grad div } \bar{v} -$$

$$- \frac{2}{3} \text{div } \bar{v} \text{ grad } \mu, \quad (1)$$

$$\frac{dp}{dt} + \rho \text{div } \bar{v} = 0 \quad (2)$$

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$$\rho C_v \frac{dT}{dt} = I \operatorname{div}(\lambda \operatorname{grad} T) - p \operatorname{div} \vec{v} + 2\mu \dot{S} - \frac{2}{3} \mu (\operatorname{div} \vec{v})^2 \quad (3)$$

where the symbols have their usual meaning, except:
I - mechanical equivalent of heat; S - tensor of the velocity of
deformation; $\lambda(T)$ - coefficient of heat conductivity.
Employing the small perturbation method, the authors distinguish
viscous and non-viscous instability at high Reynolds numbers.
In the case of non-viscous instability the arguments of Lord
Rayleigh (Ref.3) and W. Tollmien (Ref.4), viz. that the necessary
and sufficient condition of non-viscous instability in a symmetric
flow is simply the existence of the point of inflection in the
velocity profile, still hold true. Stable solution of the system
of Eqs. (1) to (3) for the flow between two flat parallel plates
is dealt with in earlier work of the authors (Ref.5). In the
present paper the authors extend the analysis by superimposing on
the stable flow small disturbances and utilize the Rayleigh—
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Fluids Flowing Between Flat Parallel Walls

Tollmien criterion for the non-viscous instability. They arrive
at the conclusion that the instability develops at some large
value of Reynolds number, which is the upper critical Reynolds
number, as given by:

$$\frac{Pr_w}{Pr_{Tw} + T_w} - 1 \Bigg] \frac{Pr_w}{K_{\Delta T}^{\circ C} Ga_w} \Bigg]^{1/2} \cdot Re_1 \geq 0.807 \quad (15)$$

where Pr = Prandtl number; Ga - Gallileo number, $K_{\Delta T}^{\circ C}$ -
specific gradient of heat content.

There are 2 figures and 5 references: - 2 Soviet and 3 non-Soviet.

ASSOCIATION: Kuybyshevskiy aviatsionnyy institut, Kafedra
aerodinamiki (Department of Aerodynamics,
Kuybyshev Aviation Institute)

Card 4/4
SUBMITTED: July 1, 1960

S/152/61/000/003/003/003
B129/B201

AUTHORS: Kudryashev, L. I., Golovin, V. M.
TITLE: Problem of the stability of the laminar motion of a viscous liquid in circular cylindrical pipes
PERIODICAL: Investiya vysshikh uchebnykh zavedeniy. Neft' i gaz, no. 3, 1961, 107-112

TEXT: The authors studied the effect of the dissipative heating and heat exchange with the surrounding medium upon the stability of the laminar flow of a viscous liquid in circular cylindrical pipes. Using the theorem by Rayleigh-Tollmien, the nonviscous instability of the flow with respect to the hydrodynamic and thermal stabilization is shown, and the criterional inequality for the determination of the highest critical Reynolds' number is given. The problem of the stability of the laminar motion and its transition into turbulent motion is of theoretical and of practical importance. The explanation of all factors having an effect upon the stability of the laminar motion in one or the other direction is of importance both for the further elaboration of theoretical bases and also directly from

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the technical viewpoint, as it is associated with the possibility of reducing energy losses in the transport of liquids and gases. Therefore, a great number of theoretical and experimental studies has appeared since the publication of the first paper by O. Reynolds. Although the authors do not have the possibility, within the scope of the present paper, of dealing extensively with the consideration and the evaluation of the various papers, investigation methods, and results obtained, it is possible, however, to note certain deficiencies, which are quite essential, in their opinion, in the formulation of the problem. One may see from the mathematical formulation of the task that in most cases insufficient attention is devoted to the problems of the heat exchange of the liquid with the surrounding medium, its heating at the expense of the dissipation of the mechanical energy, and thus, of the change of its physical parameters with temperature. At the same time, this change is bound to have a considerable effect upon the characteristic of the motion. If neglecting these factors in the study of the motion with not too high Reynolds' numbers is still somehow justified, it is no more so in the analysis of the stability of a longer lasting laminar motion, especially as regards the problem of the presence of the highest critical Reynolds number. From this

Card 2/3

Problem of ...

S/152/61/000/003/003/003
B129/B201

viewpoint the present work may be of some interest, inasmuch as the attempt is made to take into account the effect of the abovementioned factors. The authors have used formulas to examine the relationships between temperature, velocity, heat exchange, etc. between the liquids (petroleum, alcohols, water). Conclusions: Basing on the use of the total system of equations of hydrodynamics and heat exchange, and also of the theorems by Rayleigh-Tollmien, the authors show the nonviscous instability of the flow in the stabilized part (in hydrodynamic and thermal respects) of the circular cylindrical pipe, starting with a rather high upper critical Reynolds number. The criterional equation for the determination of the highest critical Reynolds number is given. There are 6 references: 1 Soviet-bloc and 5 non-Soviet-bloc.

ASSOCIATION: Kuybyshevskiy industrial'nyy institut imeni V. V. Kuybysheva
(Kuybyshev Industrial Institute imeni V. V. Kuybyshev)

SUBMITTED: July 6, 1960

Card 3/3

KUDRYASHEV, L.I.; GOLOVIN, V.M.

Stability of the laminar flow of a viscous dripping liquid in circular
cylindrical pipes. Izv. vys. ucheb. zav.; neft' i gaz 4 no.3:
107-112 '61. (MIRA 16:10)

1. Kuybyshevskiy industrial'nyy institut im. V.V.Kuybysheva.

GOLOVIN, V.M., inzh.

Nonuniformity of density distribution in baled cotton fibers.
Tekst.prom. 25 no.2:31-33 F '65. (MIRA 18:4)

1. Rukovoditel' laboratorii pressovaniya TsNIKhProm.

1152-15

1150000031

$$\frac{d\theta}{dx} = \frac{1}{\theta} \left(\frac{d\theta}{dx} + \frac{d\theta}{dx} \right) + \left(\frac{d\theta}{dx} \right)^2 \quad (7)$$

3

$$\frac{d\theta}{dx} = \frac{1}{\theta} \left(\frac{d\theta}{dx} + \frac{d\theta}{dx} \right) + \left(\frac{d\theta}{dx} \right)^2 \quad (8)$$

The problem is solved by introduction of a new variable representing the dissipation factor. A figure shows the change in the mean temperature of the fluid along the length of the pipe. The results show that the magnitude of dissipation factor is of the order of the magnitude of the dissipation factor introduced may be considered. For example, in the flow of a fluid in a pipe of diameter 10 mm radiator with a width 25 mm (0.01 m) with a velocity 1.5 m/sec, the temperature difference between the temperature of the fluid and the walls reaches 8%. It is concluded that in dissipation factor with high values of the dissipation factor, and corresponding high viscosity and flow rate of the fluid, the dissipation factor can be very important and must be taken into account in practical calculations. Orig. art. has: 10 formulas, 1 figure, and 1 table.

SUB CODE: 20/ SUBM DATE: 00/ ORIG REF: 000/ SOV REF: 000/ OTH REF: 000

2/2

[illegible]

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

[illegible]

31 MAY 1954
 EFFECT OF MECHANICAL STRESS (TENSILE STRESS) ON THE HEAT TRANSFER DURING BOILING
 OF WATER IN A SMALL VERTICAL TUBE AT PRESSURE 20-25 ATM

Source: Mathematical Engineering, Vol. 4, no. 45, pt. 2, 1963. Doklady
Akad. Nauk SSSR, no. 159, 1963. Russian. English
summary. 10 refs. Mathematical problems of the theory of
the stability of the motion of systems of the type of the
Lagrange equations. 10 refs.

TEMPERATURE, Heat transfer, Temperature distribution, Reynolds number, Nusselt

Abstract. The effect of increasing liquid velocity on the local heat transfer rate of a liquid flowing through a horizontal pipe is analyzed. It is assumed that the

ARTHR: Dymarskiy, Ya. K.; Pashkov, M. N.; Golovin, V. N.
 ORG: none

SOURCE CODE: UR/0191/65/000/002/0012/0045

TITLE: Use of polymer films for separating liquid homogeneous mixtures
 SOURCE: Plasticheskiye massy, no. 2, 1965, 44-45

ABSTRACT: This article presents a review of the selective permeability of polymeric films for liquids and gases and some of the results that have been achieved to date. In the Soviet Union a new method has been developed which does not use high pressure on the liquid phase and a vacuum on the gas phase to separate a mixture of acetone-dichloroethane and aqueous solutions of acetone, ammonia and phenol, and also to separate water-alcohol solutions on cellulose films. The authors have studied the separation of a number of acetone and near-boiling mixtures on various films. It is advantageous to use heat-stable films in this new method since the rate of permeability depends substantially on the temperature. For example, polypropylene films, not inferior to polyethylene films in selectivity of separation, can operate at considerably higher temperatures. The effect of temperature on the rate and selectivity of separation is presented. Conditions under which the industrial advantage in using the film separation method are cited. For instance, there is still no possibility of predicting the rate of permeability and the selectivity

Case 1/2

UDC: 678.06:539.238:66.066

Acc No: AP501358

of separation from the properties of the mixture components and from the structure of the polymer. Orig. art. has 3 figures. [UFGS]

SUB CODE: D7, AL / SUBM DATE: none / ORIG REF: 010 / OTH REF: 006

GOLOVIN, V. N.

Golovin, V. N. - "The theoretical bases of chain feeder computations," Trudy Sev.-Kavk. gorno-metallurg. in-ta, Issue 5, 1949, p. 33-50

SO: U-4934, 29 Oct 53, (Istopsis 'Zhurnal 'nykh Statey, No. 10, 1949).

BELOVITSKIY, G.Ye.; COLOVIN, V.N.; SUKHOV, L.V.

Spring board used in recording multiple scattering of particles
in photographic emulsions. Prib. i tekhn. eksp. no.1:102-105
Jl-Ag '56.

(MLRA 10:2)

1. Fizicheskiy institut imeni P.N. Lebedeva Akademii nauk SSSR.
(Photomicrography) (Photography, Particle track)

GOLOVIN, V. N.

USSR/Nuclear Physics - Installations and Instruments.
Methods of Measurement and Research.

C-2

Abs Jour : Ref Zhur - Fizika, No 4, 1957, 8599
Author : Belovitskiy, G.Ye., Golovin, V.N., Sukhov, L.V.
Inst : Physics Institute, Academy of Sciences, USSR.
Title : Spring Stage for Measuring Multiple Scattering of
Particles in a Photographic Emulsion.
Orig Pub : Pribury i tekhn. eksperimenta, 1956, No 1, 162-165.

Abstract : Description of the construction of a spring stage, having
very low noise level ($\sim 0.01 - 0.03 \mu$). The noise
measurement occurring during vertical displacement of
the objective is carried out, as is the measurement of
thermal noise due to non-uniform heating of various parts
of the microscope. Steps that permit substantial reduc-
tion of the thermal noise are proposed.

Card 1/1

SOLOVYOV, Vladimir.

Study of the formation of deposits on the screens of TP.
90 boilers. Teploenergetika 11 no.3:23-28 Mr '64.

(MIRA 17:6)

1. Tsentral'nyy kotloturbinyy institut.

GOLOVIN, V.N., inzh.

Results of the studies of the contamination of the radiant tubes
of TP-17 boilers operating on Baltic oil shale. Energomashinostroenie
10 no.6:11-14 Je '64.
(MIRA 17:9)

MARTYUSHIN, I.G.; GOLOVIN, V.N.

Study of apparatus with a fluidized bed and sectional downcomerless
plates. Trudy MIKHM 26:23-32 '64.
(MIRA 18:5)

DYMER-SHEV, Yu.Y.; PANKHICV, M.N.; GOLOVIN, V.N.

Application of polymer films for separating liquids in uniform mixtures.
Plast. massy no. 2:44-45 '65.

(MIRA 18:7)

GOLOVIN, V.N., inst.

Clogging of boiler screens. Teploenergetika 12 no.4:42-47 Ap '65.
(MIRA 18:5)

1. Tsentral'nyy kotloturbinnyy institut.

ACC NR: AR6035067

SOURCE CODE: UR/0282/66/000/008/0036/0036

AUTHOR: Dytnerskiy, Yu. I.; Golovin, V. N.

TITLE: New method of separating liquid mixtures with the aid of polymer films by permeation

SOURCE: Ref. zh. Khimicheskoye i kholodil'noye mashinostroyeniye, Abs. 8.47.236

REF SOURCE: KhISA. 2-oy Mezhdunar. kongr. khim. inzh. tekhn., khim. oborud. i avtomat., Marianske Lazne, 1965 g. S. 1, 1965, S2.6

TOPIC TAGS: polymer film, test method, mixture separation, CHEMICAL SEPARATION, SURFACE FILM, POLYMER, CHEMICAL

ABSTRACT: The results of investigations on a method of separating liquids and gases of homogeneous mixtures with the aid of polymer films are reported. [Translation of abstract] [NT]

SUB CODE: 11, 07/

Card 1/1

UDC: 66.048.001.2

SHCHERBA, M.L. prof.; SMIRNOVA, Z.A.; GOLOVIN, V.P.

Clinical variations of amyloidosis. Sov. med. 27 no.11:19-24
N '63 (MIRA 18:1)

1. Iz propedavicheskoy terapevticheskoy kliniki (ispolnya-
yushchij obyazannosti zaveduyushchego - prof. M.L. Shcherba)
i Leningradskogo meditsinskogo instituta imeni I.P.Pavlova
i Leningradskoy oblasti klinicheskoy bol'nitsy (glavnyy
vrach V.N.Sukhobskiy).

L 07559-67 EWF(1) IJP(e) JGS/WW/GD
ACC NR: AT6029317

SOURCE CODE: UR/0000/66/000/000/0156/0166.

AUTHOR: Labunstov, D. A.; Kol'chugin, B. A.; Golovin, V. S.; Zakharova, E. A.;
Vladimirova, L. N.

ORG: none

69

B+1

TITLE: Investigation of the mechanism of the nucleate boiling of water using high
speed moving picture photography

SOURCE: Moscow. Energeticheskii institut. Teploobmen v elementakh energeticheskikh
ustanovok (Heat exchange in power installation units). Moscow, Izd-vo Nauka, 1966,
156-166

TOPIC TAGS: nucleate boiling, high speed photography, heat transfer coefficient

ABSTRACT: The experiments were carried out on a Z-shaped silver plate. The specific
heat loads in the experiments varied from 40×10^3 to 150×10^3 watts/m², and the
pressure from 1 to 100 bars. The article describes the results of an investigation of
the following characteristics of the boiling mechanism: the magnitudes of the bubble
densities on the heating surfaces, the values of the breakaway diameters, the
macroscopic boundary angles, and the average frequency and rate of growth of the
bubbles on the boiling surface. The experimental apparatus consisted of a vertical
cylindrical vessel with a removable cover and a condenser. The experimental section

Card 1/2

I. 07559-67

ACC NR: AT6029317

was a 99.99% silver plate bent at a right angle, having a thickness of 0.2 mm and a width of 2 mm, and placed on its wide edge. The load on the plate was created by a low voltage direct current. Before the experiments, the surface was given a special preparatory treatment, after which it had a cleanliness of Class 8b, GOST 2789-51. The working fluid was distilled water with a salt content of 0.2-0.5 grams/m³. Two series of experiments were made; one on freshly prepared surfaces and the other on surfaces which had been used. The experimental heat transfer data are shown in a table. The following conclusions were drawn: 1) the values of the heat transfer coefficients for surfaces which had been used were lower than those for freshly prepared surfaces; 2) there was observed a sharp decrease in the breakaway diameter with an increase in pressure; 3) the rate of growth of the bubbles slowed down sharply with an increase in pressure; 4) the average macroscopic boundary angles changed only slightly with an increase in pressure. Orig. art. has: 17 formulas, 11 figures and 1 table.

SUB CODE: 20/ ^{14/} SUBM DATE: 05Apr66/ ORIG REF: 010/ OTH REF: 013

Card 2/2 nst

L 2115-66 ENT(m)/EMP(1)/T WW/JW/WR/RM

ACC NR: AP6008837

SOURCE CODE: UR/0294/66/004/001/0147/0148

AUTHOR: Golovin, V. S.; Kol'chugin, B. A.; Zakharova, E. A. 34

ORG: Power Institute im. G. M. Krzizhanovskiy (Energeticheskiy institut) B

TITLE: Measurement of the rate of growth of vapor bubbles during the boiling of various liquids

SOURCE: Teplofizika vysokikh temperatur, v. 4, no. 1, 1966, 147-148

TOPIC TAGS: boiling benzene, ethyl alcohol, water, vaporization, gas bubble

ABSTRACT: The authors obtained data on the rate of growth of vapor bubbles on the heat-transfer surface during the boiling of benzene, ethyl alcohol, and water for different thermal loads and saturation pressures in an experimental set-up described elsewhere (D. A. Labuntsov, B. A. Kol'chugin, V. S. Golovin, E. A. Zakharova, L. N. Vladimirova. Teplofizika vysokikh temperatur, 2, No. 3, 446, 1964). The experiments were performed with strips of silver and nickel-plated copper, using the methods of the earlier work. The results of the primary processing of motion picture data showed that, for all the cases investigated, the relationship $R \sim \tau^{1/2}$ (where R is the vapor bubble radius, τ is the time of its growth on the boiling surface) is revealed quite distinctly. This made it possible to calculate the values $R/\tau^{1/2}$, which are tabulated for various liquids and mode parameters. These data, together with the results of the earlier work, obtained during the boiling of water on a silver strip are shown in a diagram. The new data confirm the fundamental conclusions of the earlier work. Orig. art. has: 1 figure, 1 table, and 1 formula.

UDC 536.423.1

Card 1/2